

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addease COMMISSIONER FOR PATENTS PO Box 1430 Alexandra, Virginia 22313-1450 www.webjo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/706,598	11/11/2003	Hiroyuki Sakuyama	6453P014	7833	
7590 05/23/2008 Michael J. Mallie			EXAM	EXAMINER	
Blakely, Sokoloff, Taylor & Zafman LLP			BAYAT, ALI		
1279 Oakmead Parkway Sunnyvale, CA 94085		ART UNIT	PAPER NUMBER		
			2624		
			MAIL DATE	DELIVERY MODE	
			05/23/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/706 598 SAKUYAMA ET AL. Office Action Summary Examiner Art Unit ALI BAYAT 2624 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status Responsive to communication(s) filed on RCE filed on 5/13/08. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-30 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 11 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application 3) Information Disclosure Statement(s) (PTO/S6/08)

Paper No(s)/Mail Date \_

6) Other:

Art Unit: 2624

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/13/08 has been entered.

## Response to Arguments

Applicant's arguments filed on 5/13/08 have been fully considered but they are not persuasive.

On page 14 of remarks applicant argues, that Chen does not disclose or suggest the elements of claim 1 that are missing in Lecoutre. The partial decoding in Chen is not equivalent to the partial decoding in claim 1. The partial decoding of claim I is performed to reproduce a (preview) image substantially identical to a (resultant) image to be reproduced according to the post- quantization condition.

Examiner respectfully disagree with applicant, first of all the reproduce a preview image and a resultant image in not in claim language, secondly Chen provides for reproduced image (Fig.1 see converter 110, col.5 lines 39-49, see Mp bit stream).

On page 14 applicant argues Chen does not disclose or suggest reproducing another image by partially decoding and decompressing

Art Unit: 2624

coded data, which corresponds to an MP bit stream, i.e., the converted bit stream. In other words, Chen merely represents a 4:2:2 pictures in a 4:2:0 formats.

Examiner respectfully disagree with applicant Chen provides for a condition setting unit by which a user sets a post- quantization condition (co1,12 lines 30-35, see unit 380 which is set by user setting); for reproducing image data the same as image data reproduced by decoding and decompressing the coded data after post- quantization processing in accordance with the post-quantization condition (Fig.1 see converter 110. col .5 lines 39-47 note when a pre-compressed 4:2:2 P bit stream is input, a 4:2:2 to 4:2:0 bit stream converter partially decodes the 4:2:2 bit stream and re-assemble the results to provide a MP bit stream, and more detail process shown in Fig.3, Note element 380 in Fig. 3 co1.12 lines 30-35 corresponds to a post-quantization process, further note a QDC unit 380 may be used to perform the re-quantization of DC chroma coefficients if requested by a user setting, and the reason for this is "to avoid the need to fully decode the processed bit stream during the format conversion see col.3 lines 23-30 of chen. Further the same reasoning applies for independent claims 17 and 24.

Application/Control Number: 10/706,598 Page 4

Art Unit: 2624

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C.

112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 17 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 17 and 24 the phrase "reproduce an image substantially identical to an image which will be reproduced by decoding and decompressing the coded data" is unclear to the Examiner; please define "an image which will be reproduced by decoding and decompressing the coded data".

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2624

Claims 1-7, 10-12, 17-20, 22 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lecoutre (Pub. No. US 2002/0196851 A1) as applied in view of Chen et al. (US 6,259,741).

In regard to claim 1, Lecoutre provides a partial decoding and decompression unit (Fig.4 element 21, Para. 36) to partially decode and decompress (Fig.4 element 21, Para. 36 lines 6/11, see partial decoding and reencoding) coded data (Fig. 4 element S1) in accordance with the post-quantization condition set by the condition setting unit (Fig.4 element 24, para.36 lines 6-11); and an image data displaying unit to display the image reproduced by the partial decoding and decompression unit (para.36 last line, see video telephony, which includes a display unit).

Lecoutre does not teach, a condition setting unit by arbitrarily set a postquantization condition; reproducing image substantially identical to an image which will be reproduced by decoding and decompressing the coded data after post-quantization processing in accordance with the post-quantization condition.

Chen provides for a condition setting unit by arbitrarily setting a postquantization condition (col.12 lines 30-35, see unit 380 which is set by user setting); reproducing image data the same as image data reproduced by decoding and decompressing the coded data after post-quantization processing in accordance with the post-quantization condition (Fig.1 see converter 110, col.5 lines 39-47 note when a pre-compressed 4:2:2 P bit stream is input, a 4:2:2 to 4:2:0 bit stream converter partially decodes the 4:2:2 bit stream and re-assemble

Art Unit: 2624

the results to provide a MP bit stream. therefore efficiencies can be achieved, by representing a 4:2:2 reference picture in a 4:2:0 format for converting inter coded frames). It would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Chen with the system and method of Lecoutre because the system should provide a combined 4:2:2 to 4:2:0 converter and a normal transcoder to perform 4:2:2 p to Mp transcoding with a format conversion. Thus, the system will avoid the need to fully decode the processed bit stream during the format conversion (Col.3 lines 23-30 of Chen).

With regard to claims 2, 18 and 25, see the rejection of claim 1. They recite similar limitations as claim 1. Except for a controller for controlling the decoding unit (Fig.4 element 26, Para's 50 and 73 of Lecoutre). Hence they are similarly analyzed and rejected.

As to claims 3-4, 19-20 and 26-27, see the rejection of claim 1. They recite similar limitations as claim 1. Except for a rewriting or a writing unit to rewrite or write header information of the coded data (Para.67 of Lecoutre, note it is possible to change the size of the pictures by specifying it in the header field of said picture). Hence they are similarly analyzed and rejected.

In regard to claims 5, 21 and 28, see the rejection of claim 1. They recite similar limitations as claim 1 hence they are similarly analyzed and rejected.

As to claims 6-7, 22 and 29, Lecoutre provides for partial decoding and reencoding of streams, such as for example re-quantization of the encoded data, by a user (Para.36). Lecoutre does not teach for a condition saving unit to save a

Art Unit: 2624

plurality of post-quantization conditions set by the user using the condition setting unit, and a condition selector by which the user selects one of the post-quantization conditions saved in the condition saving unit.

Chen provides for a condition saving unit to save a plurality of postquantization conditions set by the user using the condition setting unit (Fig.7 element 380 col.12 lines 30-35 and element 382, col. 13 lines 40-45), and a condition selector by which the user selects one of the post-quantization conditions saved in the condition saving unit (Fig.7 element 382, corresponds to newly selected post-quantization condition).

In regard to claim 10, see the rejection of claim 1. It recited similar limitations as claim 1. Hence it is similarly analyzed and rejected (note quantization step or level sets the compression rate, which is inherent).

With regard to claims 11-12, Lecoutre provides for an image modifying unit to enlarge, reduce, or scroll an image displayed on the display unit in accordance with an instruction of the user; wherein a magnification of the image is displayed on the display unit (Para.67, note it is possible to change the size of the picture).

In regard to claim 17, see the rejection of claim 1. It recited similar limitations as claim 1. Hence it is similarly analyzed and rejected.

In regard to claim 24, see the rejection of claim 1. It recited similar limitations as claim 1. Except for a computer readable medium (para.76 of Lecuoutre). Hence it is similarly analyzed and rejected.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lecoutre (Pub. No. US 2002/0196851 A1) as applied in view of Chen et al. (US 6,259,741), further in view of Hanamura et al. (US 6,587,508).

Lecoutre as modified by Chen provides for partial decoding and re-encoding of streams, such as for example re-quantization of the encoded data, by a user (Para.36) and saving unit to save a plurality of post-quantization conditions set by the user using the condition setting unit; and further the post-quantization condition set by the user using the condition setting unit, (Fig.7 element 380 col.12 lines 30-35 and element 382, col. 13 lines 40-45 of Chen).

Lecoutre as modified by Chen does not teach for an averaging unit to average the post-quantization conditions saved in the condition saving unit.

Hanamura provides for an averaging unit to average the post-quantization conditions saved in the condition saving unit (col.31 lines 40-45). It would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Hanamura with the system and method of Lecoutre as modified by Chen because adapting a quantization parameter to perform the effective real timely rate control over the second coded moving picture sequence signal with low delay (see field of the invention).

In regard to claim 9, see the rejection of claim 8. It recited similar limitations as claim 8. Hence it is similarly analyzed and rejected.

Claims 13-16, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lecoutre (Pub. No. US 2002/0196851 A1) as applied in view

Art Unit: 2624

of Chen et al. (US 6,259,741), further in view of Okada (Pub. No. Us 2002/0154823 A1).

In regard to claims 13-16, 23 and 30, Lecoutre as modified by Chen provides for partial decoding and re-encoding of streams, such as for example re-quantization of the encoded data, by a user (Para.36) and saving unit to save a plurality of post-quantization conditions set by the user using the condition setting unit; and further the post-quantization condition set by the user using the condition setting unit, (Fig.7 element 380 col.12 lines 30-35 and element 382, col. 13 lines 40-45 of Chen).

Lecoutre as modified by Chen does not teach for an imaging unit to photograph one of a still image and a moving image; and a communication unit to receive coded data from an external apparatus and transmit to the external apparatus the post-quantization condition set by the user using the condition setting unit; wherein the post-quantization condition is related to an image quality, and wherein the coded data are JPEG 2000 coded data.

Okada provides, for an imaging unit to photograph one of a still image and a moving image (Fig.7, Para. 61)

and a communication unit to receive coded data from an external apparatus and transmit to the external apparatus the post-quantization condition set by the user using the condition setting unit (Fig.7 element 224, Para. 60); wherein the post-quantization condition is related to an image quality (para.10), and wherein the coded data are JPEG 2000 coded data (para.18). It would have

Application/Control Number: 10/706,598 Page 10

Art Unit: 2624

been obvious to a person of ordinary skill in the art to incorporate the teaching of Okada with the system and method of Lecoutre as modified by Chen because a decoding unit which decodes a coded image which comprises a digital image extracted from the received signal, and a simplifying unit which switches an ensuing part of the decoding process on any frame included in the coded image to a simplified process whenever the said frame is not completely decoded within a predetermined time ( see para 0023).

#### Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Bayat whose telephone number is 571-272-7444. The examiner can normally be reached on M-F 9:00 AM-5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ali Bayat/ Patent Examiner Division 2624 5/21/08